

# Work Order ID 53926

November 23, 2009 2:51:33 PM



Page 1

|                |                        |            |      |               |       |  |
|----------------|------------------------|------------|------|---------------|-------|--|
| Item ID:       | D3463-042              | Accept     |      | Setup         | Start |  |
| Revision ID:   | B                      |            |      |               | Stop  |  |
| Item Name:     | Step Weldment Assembly |            |      |               |       |  |
| Start Date:    | 23/11/2009             | Start Qty: | 2.00 | Cust Item ID: |       |  |
| Required Date: | 02/12/2009             | Req'd Qty: | 2.00 | Customer:     |       |  |
| Reference:     |                        |            |      |               |       |  |

|            |               |           |       |                 |            |  |       |  |     |       |  |
|------------|---------------|-----------|-------|-----------------|------------|--|-------|--|-----|-------|--|
| Approvals: | Process Plan: | <u>PL</u> | Date: | <u>09/11/23</u> | Tooling:   |  | Date: |  | Run | Start |  |
|            | QC:           |           | Date: |                 | SPC (Y/N): |  | Date: |  |     | Stop  |  |

| Sequence ID/<br>Work Center ID | Operation<br>Description                      | Set Up/<br>Run Hours | Draw<br>Number | Draw<br>Rev. | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|---|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------|
| <b>Draw Nbr</b>                | <b>Revision Nbr</b>                           |                      |                |              |              |               |               |                  |                |
| D3463                          | Rev B   |                      |                |              |              |               |               |                  |                |
| 100                            |   | 0.00                 |                |              |              |               |               |                  |                |
|                                | Large Fab                                     |                      |                |              |              |               |               |                  |                |
| Large Fab                      | Memo  | 0.00                 |                |              |              |               |               |                  |                |
| Large Fab                      | Weld assembly as per dwg D3463 using DT8875   |                      |                |              |              |               |               |                  |                |
| 110                            |   | 0.00                 |                |              |              |               |               |                  |                |
|                                | QC9- Inspect visual per QSI004- Fusion Welds  |                      |                |              |              |               |               |                  |                |
| QC                             | Memo  | 0.00                 |                |              |              |               |               |                  |                |
| Quality Control                |   |                      |                |              |              |               |               |                  |                |
| 120                            |   | 0.00                 |                |              |              |               |               |                  |                |
|                                | QC5- Inspect part completeness to step on W/O |                      |                |              |              |               |               |                  |                |
| QC                             | Memo  | 0.00                 |                |              |              |               |               |                  |                |
| Quality Control                |   |                      |                |              |              |               |               |                  |                |

PL 09/11/26 (2x)

PL 09/11/26 (2)

(X2 RA) B

⇒ 8 07/11/26

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

**Work Order ID 53926**

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Item ID: D3463-042

Accept



Setup Start



Revision ID: B

Stop



Item Name: Step Weldment Assembly

Start Date: 23/11/2009 Start Qty: 2.00



Cust Item ID:

Required Date: 02/12/2009 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Draw<br>Number | Draw<br>Rev. | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------|

160

Identify as per dwg &amp; Stock Location: \_\_\_\_\_

0.00



Packaging

Memo

0.00

Packaging

C 9/11/30 (2)

170

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09/11/30  
12/09-11-30  
(2)

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                  |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|----------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                  |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng. | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                  |                |                           |                       |                          |
|      |      |                                  |                             |                                  |                |                           |                       |                          |
|      |      |                                  |                             |                                  |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

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Page 1

Work Order ID: 53926

Parent Item: D3463-042RevB

Parent Item Name: Step Weldment Assembly


Comments: IPP RevB: revB as per dwg 09.11.11 DD verified by:EC

Start Date: 23/11/2009



Required Date: 02/12/2009

Start Qty: 2.00


Required Qty: 2.00

| Component Item ID/<br>Item Name  | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Remaining<br>Qty To Pick | Qty<br>Issued | Date<br>Issued | Status |
|--|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|--------|
| 238-806<br><br>SS DOWEL PIN 1" LONG |                        | Purchased     | No          |                     |                  | 100             | Each               | 80.0000        | 4.0000                   |               |                |        |

| <u>Warehouse</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|------------------|----------------|-----------------|
| <u>Location</u>  |                |                 |
| Main Warehouse   |                |                 |
| ST               | 80             |                 |
| 105037           | 3              |                 |
| 111088           | 73             |                 |
| 19080            | 4              |                 |

|  |  |              |    |  |  |     |      |         |        |  |  |  |
|--|--|--------------|----|--|--|-----|------|---------|--------|--|--|--|
| * D3453-3RevB<br><br>Clevis |  | Manufactured | No |  |  | 100 | Each | 0.0000  | 2.0000 |  |  |  |
| D3453-5RevB<br><br>Plug     |  | Manufactured | No |  |  | 100 | Each | 10.0000 | 2.0000 |  |  |  |

| <u>Warehouse</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|------------------|----------------|-----------------|
| <u>Location</u>  |                |                 |
| Main Warehouse   |                |                 |
| ST               | 10             |                 |
| 52985            | 10             |                 |

|   |  |              |    |  |  |     |      |         |        |  |  |  |
|---|--|--------------|----|--|--|-----|------|---------|--------|--|--|--|
| D3463-1RevB<br><br>Arm |  | Manufactured | No |  |  | 100 | Each | 10.0000 | 2.0000 |  |  |  |
|---|--|--------------|----|--|--|-----|------|---------|--------|--|--|--|

| <u>Warehouse</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|------------------|----------------|-----------------|
| <u>Location</u>  |                |                 |
| Main Warehouse   |                |                 |
| ST               | 10             |                 |
| 46148            | 10             |                 |

4x SH 09/11/26

SH 09/11/26

B46151 → 2x SH 09/11/26

2x SH 09/11/26

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



# Picklist Print

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Work Order ID: 53926



Parent Item: D3463-042RevB



Parent Item Name: Step Weldment Assembly

Start Date: 23/11/2009

Required Date: 02/12/2009

Comments: IPP RevB: revB as per dwg 09.11.11 DD verified by:EC

Start Qty: 2.00

Required Qty: 2.00

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Remaining<br>Qty To Pick | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|--------|

D3463-3RevB

Manufactured

No

100

Each

68.0000

2.0000



Step

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

68

46149

17

46269

51

2x SH 09/11/26

D3463-5RevB

Manufactured

No

100

Each

21.0000

4.0000



End Cap

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

21

46270

21

4x SH 09/11/26

D3463-7RevB

Manufactured

No

100

Each

3.0000

2.0000



Drag Arm

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

3

46271

3

2x SH 09/11/26

November 23, 2009 2:51:40 PM

Shop Packet Print

Page 2

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

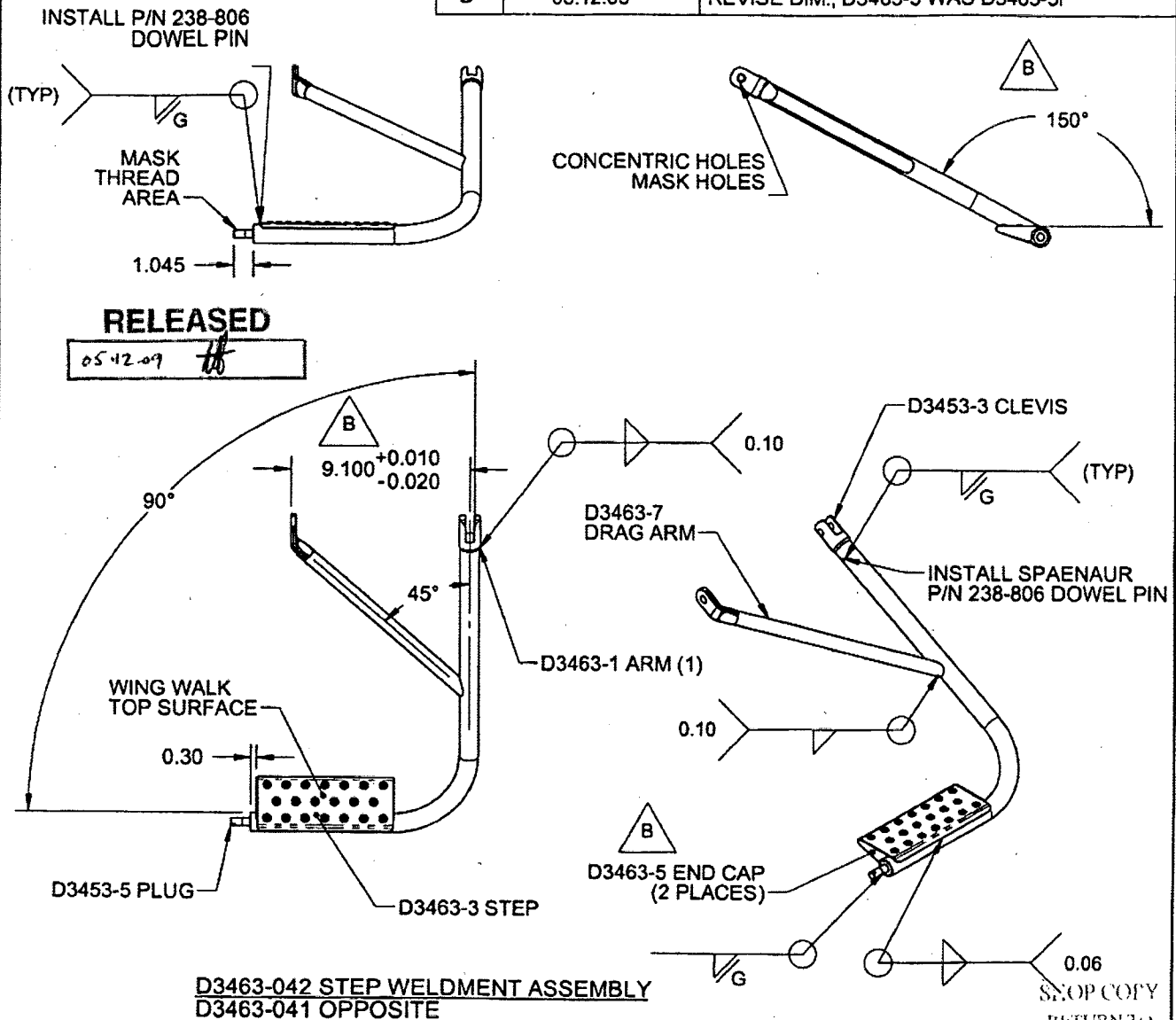
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

**DART**

|                         |                |  |                        |
|-------------------------|----------------|--|------------------------|
| DESIGN<br>RF            | DRAWN BY<br>RF | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br>#            | APPROVED<br>#  | DRAWING NO.<br><b>D3463</b>                              | REV. B<br>SHEET 1 OF 4 |
| DATE<br><b>05.12.05</b> |                | TITLE<br><b>STEP WELDMENT</b>                            | SCALE<br>1:8           |
| A                       | 05.09.20       | NEW ISSUE  |                        |
| B                       | 05.12.05       | REVISE DIM.; D3463-5 WAS D3463-5F                        |                        |

**NOTES:**

- 1) WELD PER DART QSI 004
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010
- 6) IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER

SNOP COPY  
RETURN TO  
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UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. **33926**

**1071123**

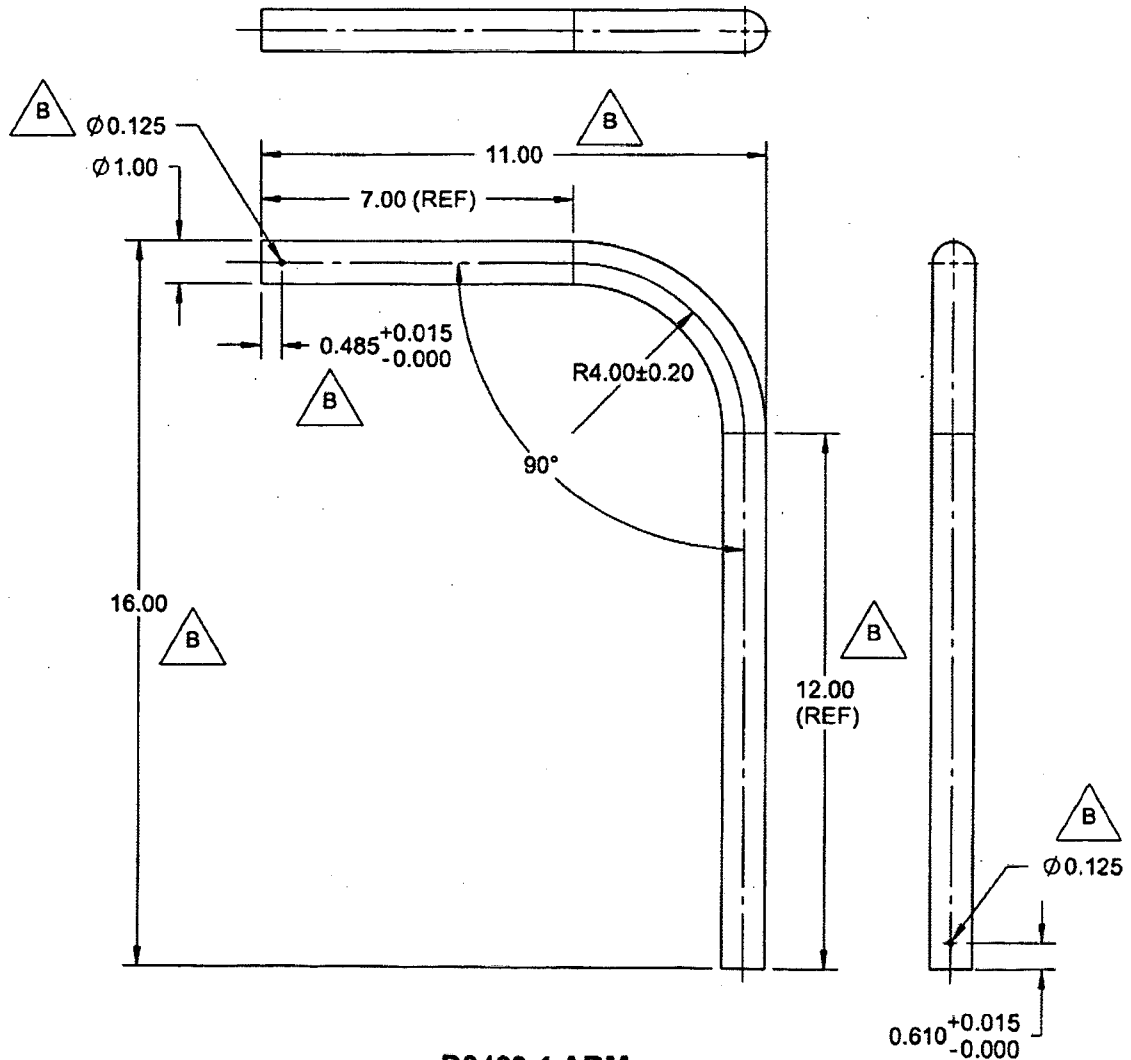
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**DART**

*w/o 53926*

|                               |                                |  |        |
|-------------------------------|--------------------------------|--|--------|
| DESIGN<br>RF                  | DRAWN BY<br>RF                 | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |        |
| CHECKED<br><i>[Signature]</i> | APPROVED<br><i>[Signature]</i> | DRAWING NO.<br><b>D3463</b>                              | REV. B |
| DATE<br><b>05.12.05</b>       | TITLE<br><b>STEP WELDMENT</b>  | SHEET 2 OF 4<br>SCALE<br>1:4                             |        |

**RELEASED****05.12.09** *[Signature]***D3463-1 ARM****NOTES:**

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC. M304TR1.000W.120)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.025

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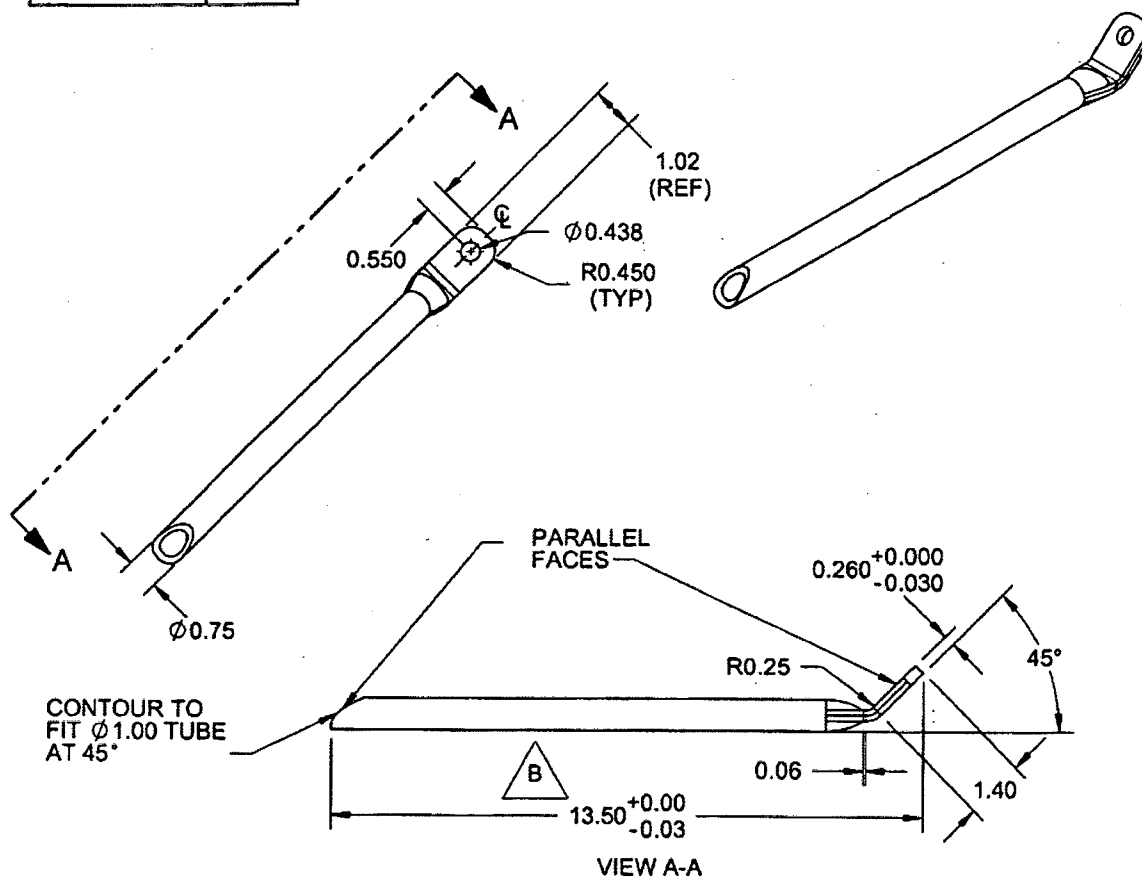
**DART**

w/10 53926

|                         |                               |  |                        |
|-------------------------|-------------------------------|--|------------------------|
| DESIGN<br>RF            | DRAWN BY<br>RF                | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br>#10          | APPROVED<br>#10               | DRAWING NO.<br><b>D3463</b>                              | REV. B<br>SHEET 3 OF 4 |
| DATE<br><b>05.12.05</b> | TITLE<br><b>STEP WELDMENT</b> |  | SCALE<br>1:4           |

**RELEASED**

05.12.09

**D3463-7 DRAG ARM****NOTES:**

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC. M304TR0.750W.120)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

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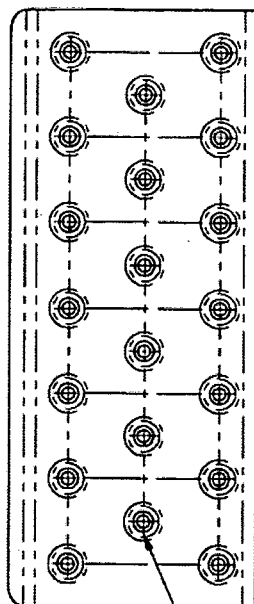
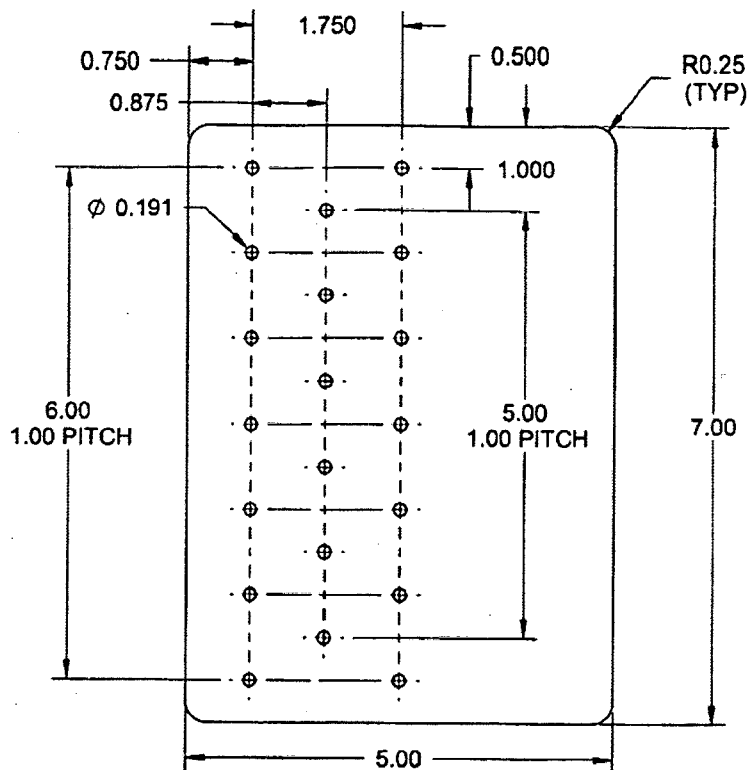
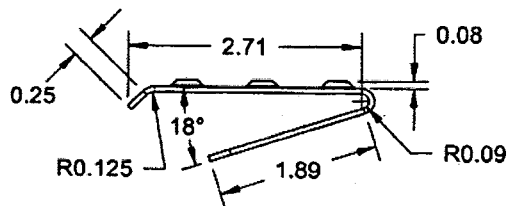
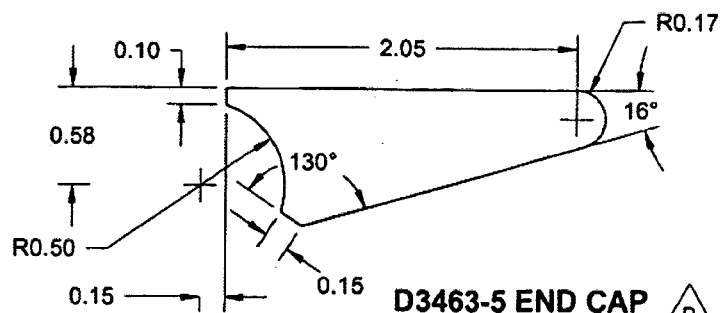
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**DART**

|                         |                               |  |                        |
|-------------------------|-------------------------------|--|------------------------|
| DESIGN<br>RF            | DRAWN BY<br>RF                | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br>#            | APPROVED<br>#                 | DRAWING NO.<br><b>D3463</b>                              | REV. B<br>SHEET 4 OF 4 |
| DATE<br><b>05.12.05</b> | TITLE<br><b>STEP WELDMENT</b> |  | SCALE<br>1:2           |

**RELEASED**

05.12.09 #

**FORM USING  
D3463-3T1****D3463-3F FLAT PATTERN****D3463-3 STEP****D3463-5 END CAP**  
SCALE 1:1**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.060 THICK (REF. DART SPEC. M304S16GA)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

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